

REMARKS

By this Amendment, claims 1-8, 10, 12-24, 26-29, 31, 33, 56, 58, 68, 70-78, 80, 81, 84-88, 90, 97, 98, 106-108, 111, and 112 are amended, claims 69, 83, and 93 are cancelled, and claims 11, 30, 32, 34-36, 57, 59-61, 64-67, 82, 89, 92, 94, 95, 99-103, 105, 109, 110, and 113 are unchanged (claims 9, 25, 37-55, 62, 63, 79, 91, 96, and 104 stand withdrawn from consideration by the Examiner).

On page 3 of the Office Action, the Examiner indicates that claims 1-8, 10-24, 26-36, 56-61, 64-78, 80-90, 92-95, 97-103, and 105-113 are currently pending (i.e., thereby indicating that the subject matter of these claims falls within the Group I claims elected for prosecution in the Response to Restriction Requirement filed on December 9, 2003). The Applicant respectfully submits that a number of claims are missing from the Group I claims elected by the Applicant. For example, claims 37-48 and 51-55 cover the embodiment of the present invention illustrated in Figs. 3 and 11. Any part of the control lever 12, 412 in the embodiments of Figs. 3 and 11 defines a "mass" that is movable with respect to the pawl (e.g., pawl post 44, 144) in locked and unlocked positions of the control lever 12, 412. By way of example only, that portion of the control lever 12 in Fig. 3 immediately above the slot 46 has a mass that is movable with respect to the pawl post 44 (i.e., capable of being extended and withdrawn with respect to the pawl post 44) in unlocked and locked states of the control lever.

Accordingly, the Applicant requests reconsideration of the claims selected by the Examiner for prosecution resulting from the election of Group I claims as discussed above. The Applicant submits that claims 1-8, 10-24, 26-48, 51-61, 64-78, 80-90, 92-95, 97-103, and 105-113 define the Group I claims that should be examined at this time.

In the Office action dated March 19, 2003, it is noted that the Information Disclosure Statements filed on March 1, 2002 and July 8, 2002 fail to comply with 37 CFR 1.98(a)(2), which requires a copy of each patent and publication cited in an Information Disclosure Statement mailed to the United States Patent and Trademark Office. The Applicant respectfully submits that copies of each reference cited in both Information Disclosure Statements were submitted with the Information Disclosure Statements. In this regard, copies of both Information Disclosure Statements and the return postcards that accompanied the

Information Disclosure Statements are provided herewith. Both postcards have been stamped by the United States Patent Office, and therefore indicate that paper copies of the documents cited in the Information Disclosure Statements were received by the United States Patent Office. Accordingly, the Applicant respectfully requests that the Examiner consider the information contained within each Information Disclosure Statement.

On page 4 of the Office Action, the Drawings of the present application are objected to under 37 CFR 1.83(a) as not showing certain claimed features claimed in claims 12, 51, and 94. In light of amendments hereby made to claims 1 and 12, the drawing objections raised with regard to the subject matter of claim 12 are hereby overcome.

Claim 51 has been withdrawn from consideration by the Examiner. Accordingly, the Applicant respectfully requests withdrawal of the drawing objection related to the subject matter claimed in claim 51.

With respect to claim 94, the drawings are objected to as lacking "at least one stop". Although not required to practice the invention as illustrated in the embodiment of Figs. 3 and 11, the Applicant hereby amends Figs. 3-7 to illustrate an exemplary stop of the latch.

On pages 5 and 6 of the Office Action, several claims are rejected under 35 U.S.C. §112, first paragraph. Claims 6, 7, 15, 17-19, 31, 59, 75, 92, 97, 100, 105, and 112 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which is not enabled.

Claims 6 and 7 are rejected under 35 U.S.C. §112, first paragraph as lacking enablement based upon the disclosed motion of elements illustrated in the Fig. 3 and Fig. 11 embodiments of the present invention. The Examiner indicates that the embodiments of Figs. 3 and 11 (i.e., those elected and now under examination) employ a lever that is movable between locked and unlocked positions only through an integral combination of translation and rotation. The Applicant respectfully submits that the manner in which the control lever 12, 412 illustrated in the Fig. 3 and Fig. 11 embodiments moves between such positions is determined at least in part upon the manner in which the lever 12, 412 is connected to other elements and the manner in which such other elements move (e.g., the orientation and manner of movement of an element connected to the lever 12, 412 via aperture 40, 440), the

position of the first and second elements 50, 52, 450, 452 at the time the lever 12, 412 is actuated, the position of the pawl 28, 428 at the time the lever 12, 412 is actuated, and upon still other factors (e.g., the forces exerted by these other elements upon the lever 12, 412). In other words, the Applicant submits that motion of the lever 12, 412 between locked and unlocked positions in the Fig. 3 and Fig. 11 embodiments can include rotational motion, translational motion, or a combination of rotation and translation depending at least in part upon these other factors. In addition, claims 6 and 7 each call for a type of motion that is not exclusive. For example, although claim 6 calls for the lever to be “translatable” to different positions with respect to the pawl, this claim language does not indicate or imply that such motion must be exclusively translational. Instead, this claim language only indicates that the lever at least includes translation. Similarly, although claim 7 calls for the lever to be “rotatable” to different positions with respect to the pawl, this claim language does not indicate or imply that such motion must be exclusively rotational.

For the reasons set forth above, the Applicant submits that claims 6 and 7 are fully enabled by the specification and drawings of the present application as originally filed.

Claims 15, 92, 97, and 112 are hereby amended. Claims 15, 92, 97, and 112 (as amended) and claim 105 are each be fully enabled by the present application as originally filed (and by the embodiments of the present invention illustrated in Figs. 3 and 11). The lost motion connection between the first and second elements 50, 52, 450, 452 defines a connection in which a surface of one element cams or rides against a surface of another (see claims 15, 92, 97, 105, and 112). In addition, claim 112 as amended is fully supported by the present application as originally filed.

Claims 17-19, 31, 39, and 100 are rejected based upon the phrase “releasing the pawl from engagement with the ratchet by transferring motive force from the lever to the pawl” and upon limitations indicating that the claimed lever is employed to unlatch the latch. It is the Examiner’s understanding that the lever is used to move the device from a locked condition to an unlocked condition, and that input lever(s) are used to unlatch the device.

The Applicant wishes to clarify the operation of the device. Specifically, the lever or “first lever” claimed in claims 17-19, 31, 39, and 100 is movable to move the pawl. By way of example only, the control lever 12, 412 in the embodiments of Figs. 3 and 11 is movable to

act upon the pawl 28, 428 via pawl post 44, 444. When the control lever 12, 412 is in an unlocked position with respect to the pawl 28, 428 (e.g., Figs. 3 and 11), the control lever 12, 412 can be actuated to release the pawl 28, 428 from the ratchet 30. Alternatively, when the control lever 12, 412 is in a locked position with respect to the pawl 28, 428 (e.g., Figs. 5 and 13), actuation of the control lever 12, 412 does not release the pawl 28, 428 from the ratchet 30.

In some embodiments (e.g., Figs. 3 and 11), movement of the control lever 12, 412 toward a locked state while the control lever 12, 412 is actuated can generate movement of the pawl 28, 428 to release the ratchet 30. Such an unlatching operation is still generated by actuation of the control lever 12, 412, but is enabled by moving the control lever 12, 412 to its unlocked state while actuated. A description of this capability is provide on page 43, line 1 to page 44, line 20 of the present application.

Accordingly, the Applicant respectfully submits that the claim language noted by the Examiner in the rejection of claims 17-19, 31, 39, and 100 is fully supported by the present application as originally filed.

Claims 59 and 75 are rejected based upon the term "lost motion connection". The Applicant respectfully submits that claims 59 and 75 are fully supported by the figures and text of the present application as originally filed. By way of example only, and with reference to the embodiment of Figs. 3 and 11, the connection between the first and second elements 50, 52; 450, 452 is a lost motion connection in which a pivot post 64, 464 on the second element 52, 452 is received within an elongated aperture 62, 462 of the first element 50, 450 (defining a lost motion connection between the first and second elements). Further support for the lost motion limitation in claims 59 and 75 is found, for example, on page 17, lines 9-12 of the present application, where a similar lost motion connection is described between the first element 50 and the control lever 12.

Accordingly, the Applicant respectfully submits that the claim language noted by the Examiner in the rejection of claims 59 and 75 is fully supported by the present application as originally filed.

On pages 6-8 of the Office Action, claims 2-4, 6, 7, 12, 15, 17-19, 31, 39, 51, 59, 65, 66, 72, 75, 81, 87, 97, 100, 105, and 112, as well as their dependents, are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

With regard to claims 2-4, 65, 66, and 72, these claims are rejected by the Examiner as having a scope falling outside of or beyond the scope of the disclosure. The Applicant respectfully submits that claims 2-4, 65, 66, and 72 are fully enabled by the disclosure of the present application as originally filed. With reference to the embodiment of the present invention illustrated in Figs. 3-7 by way of example only, the control lever 12 is pivotable about a control lever pivot 18 in both the unlocked and locked states of the control lever (illustrated in Figs. 3 and 5, respectively). However, as set forth in greater detail in the present application as originally filed, the control lever 12 can be moved between these states while partially or fully actuated. In such cases, the control lever 12 is still pivotable about the control lever pivot 18 - whether sufficiently to disengage the pawl 28 from the ratchet or otherwise. In addition, the control lever pivot 18 can remain in the same location with respect to the control lever 12 in some embodiments (pivot 18 in the illustrated exemplary embodiment of Figs. 3-7 is located in the same position with respect to the control lever by virtue of the pinned connection).

An example of the support for the subject matter claimed in claims 2-4, 65, 66, and 72 is found on page 7, lines 17-30 of the present application as originally filed:

“In some preferred embodiments of the present invention, the latch assembly is capable of properly responding to unlatching and unlocking inputs received at the same time or closely in time. In other words, when the lever used to move the pawl is actuated before or while a locking and unlocking mechanism is placed in its unlocked state, the latch assembly properly responds by unlatching the latch upon movement of the locking and unlocking mechanism to the unlocked state. In one preferred application involving a car door latch capable of being unlocked via a remote keyless entry system, the user can partially or fully actuate the door handle prior to unlocking the door or while the door is being unlocked (e.g., while the keyless entry system is

still processing the request to unlock the latch assembly, during movement of the locking and unlocking mechanism to its unlocked state, and the like). The latch assembly responds by unlatching the latch when the latch assembly is finally unlocked, and does so without requiring the user to release and re-actuate the door handle. Although the other embodiments of the present invention described above can operate without this feature, such latch assembly embodiments preferably have this capability.”

Specifically, this section of the present application makes clear that lever actuation can occur from several positions intermediate to the two end positions, and that such lever actuation can be sufficient to move the pawl to an unlatched position. This section of the present application, as well as further discussion in the detailed description (e.g., page 44, lines 12-20) fully support the claim limitations of claims 2-4, 65, 66, and 72. Therefore, the Applicant respectfully requests withdrawal of the 35 U.S.C. §112, second paragraph rejections of claims 2-4, 65, 66, and 72.

With regard to claims 6 and 7 of the present application, these claims were rejected as failing to claim a combination of translation and rotation of the lever. As discussed in greater detail above, the Applicant respectfully submits that motion of the lever 12, 412 between locked and unlocked positions in the Fig. 3 and Fig. 11 embodiments can be rotational, translational, or a combination of rotation and translation. Accordingly, claims 6 and 7 properly encompass levers movable in any such manner, because these claims are drafted in an open-ended claim format (e.g., employing the word “comprising” in the preamble of these claims). The Applicant also respectfully submits that additional claim language is not required in claims 6 and 7 (e.g., to indicate that that motion claims in claims 6 and 7 “include” translation and rotation, respectively). Interpreted as open-ended claims, these claims call for the lever to be movable by at least translation and at least rotation, respectively. The Applicant therefore respectfully requests withdrawal of the 35 U.S.C. §112, second paragraph rejections of claims 6 and 7.

With respect to claim 12, this claim is hereby amended, and is believed to overcome the 35 U.S.C. §112, second paragraph rejections thereto. Therefore, the Applicant respectfully requests withdrawal of the 35 U.S.C. §112, second paragraph rejections of claim 12.

With respect to claims 15, 97, 105, and 112, these claims are rejected based upon the term "camming". Claim 112 is hereby amended, and no longer includes the term noted by the Examiner in this rejection. Claims 15 and 97 (as amended) and claim 105 each call for one lever or element to cam or ride upon or against another. This relationship is clearly disclosed in both embodiments of Figs. 3 and 11 (by way of example only). The lost motion connection between the first and second elements 50, 52, 450, 452 defines a connection in which a surface of one element cams or rides against a surface of another. Accordingly, the Applicant respectfully submits that amended claims 15, 97, 105, and 112 are sufficiently clear and definite. Therefore, the Applicant respectfully requests withdrawal of the 35 U.S.C. §112, second paragraph rejections of claims 15, 97, 105, and 112.

With respect to claims 17-19, 31, 39, and 100, these claims are rejected as being unclear based upon the phrase "releasing the pawl from engagement with the ratchet by transferring motive force from the lever to the pawl" and upon limitations indicating that the claimed lever is employed to unlatch the latch. As described in greater detail above, some embodiments of the present invention employ a lever (e.g., control lever 12, 412 in the embodiments of Figs. 3 and 11) movable to act upon a pawl (e.g., pawl 28, 428 in the embodiments of Figs. 3 and 11) in an unlocked position with respect to the pawl, thereby releasing the pawl from the ratchet. Alternatively, when the lever is in a locked position with respect to the pawl, actuation of the lever does not release the pawl from the ratchet. Also, the ability to move an actuated lever from a locked position to an unlocked position with respect to the pawl in order to release the pawl is described on page 43, line 1 to page 44, line 20 of the present application.

The relationships between the lever and pawl just described are claimed in claims 17-19, 31, 39, and 100. The Applicant respectfully submits that such relationships are clearly claimed in order to meet the requirements of 35 U.S.C. §112, second paragraph. The

Applicant therefore respectfully requests withdrawal of the 35 U.S.C. §112, second paragraph rejections of claims 17-19, 31, 39, and 100.

With respect to claims 59 and 75, these claims are rejected as being unclear based upon the term “lost motion connection”. The Applicant respectfully submits that the term “lost motion connection” is well-understood in the art, and refers to a relationship in which an element moves a certain distance and is connected to drive another element through a different distance by virtue of the connection between the elements. An exemplary type of lost motion connection is illustrated in the embodiments of Figs. 3 and 11 (between first and second elements 50, 450, 52, 452. In these embodiments, a pivot post 64, 464 on the second element 52, 452 is received within an elongated aperture 62, 462 of the first element 50, 450. This connection enables the second element 52, 452 to be driven a distance that is different than the distance of the first element 50, 450 by virtue of relative movement of the pivot post 64, 464 within the elongated aperture 62, 462. As described in the present application, other types of lost motion connections are possible, such as those described on page 17, lines 9-12 of the present application.

Accordingly, the Applicant respectfully submits that the term “lost motion connection” as used in claims 59 and 75 is sufficiently clear and definite to meet the requirements of 35 U.S.C. §112, second paragraph. The Applicant therefore respectfully requests withdrawal of the 35 U.S.C. §112, second paragraph rejections of claims 59 and 75.

With respect to claims 51, 81, and 87, these claims are rejected as being unclear based upon the terms “stable position”. Specifically, the Examiner indicates that the invention as claimed appears to be missing elements needed to claim a stable position of the over-center device.

Claim 51 has been withdrawn by the Examiner. Accordingly the Applicant respectfully requests withdrawal of the 35 U.S.C. §112, second paragraph rejection of claim 51. Claims 81 and 87 are hereby amended. With regard to amended claims 81 and 87, the Applicant respectfully submits that the claimed “over-center device” meets the requirements of 35 U.S.C. §112, second paragraph without the addition of further elements to the claim, and is sufficiently described in the originally-filed specification. An over-center device inherently has at least one unstable position and at least two stable positions (e.g., an unstable

position separating two stable positions), which is consistent with the art-accepted definition and the definition given in the specification of the present application. Any structure having this characteristic is properly termed an “over-center device”. In this regard, even two elements can define an over-center device if properly connected and positioned with respect to one another.

By way of example only, the first and second elements 50, 52, 450, 452 of the exemplary embodiments of Figs. 3 and 11 define an over-center device by virtue of their relationship to one another. When the first element 50, 450 of this over-center device is actuated by the control lever 12, 412, the second element inherently moves to one of two sides of a center position represented as a phantom line in the figures. When the pivot 64, 464 of this over-center device is on one side of the center position 66, 466, actuation of the control lever 12, 412 only causes the pivot 64, 464 to stay on the same side of the center position 66, 466. Accordingly, this device has two stable positions without requiring springs or other elements. The stable positions of the over-center device are defined by the positional relationship of the first and second elements 50, 52, 450, 452 and the connection between the first and second elements 50, 52, 450, 452.

Claims 81 and 87 are hereby amended to further clarify the term “over-center device”. In light of this amendments and the above remarks, the Applicant respectfully submits that claims 81 and 87 meet the requirements of 35 U.S.C. §112, second paragraph. The Applicant therefore respectfully requests withdrawal of the 35 U.S.C. §112, second paragraph rejections of claims 81 and 87.

On pages 8-10 of the Office Action, claims 1-5, 7, 8, 10, 12-15, 56-59, 61, 64-78, and 80 are rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent Number 5,277,461, issued to Dzurko et al. On pages 10-11 of the Office Action, claims 1-8, 10, 12-14, 16-24, 26-36, 56-61, 65-78, 80-88, 90, 93-95, 97-103, 105-111, and 113 are rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent Number 6,126,212, issued to Fujihara.

Claim 1 is hereby amended, and calls for (amendment marks not shown; underlining added for emphasis):

. . . a pawl . . .

. . . a first lever at least partially located in the housing and movable to two different positions with respect to the pawl, the first lever having a pivot point about which the first lever pivots in both of the two different positions, the pivot point having substantially the same location with respect to the first lever in both of the two different positions, the first lever pivotable about the pivot point in a first of the two different positions of the first lever to move the pawl and to disengage the ratchet, the first lever incapable of moving the pawl sufficiently to disengage the ratchet in a second of the two different positions of the first lever;

a second lever at least partially located in the housing and coupled to the first lever at the pivot point; and

a third lever at least partially located in the housing and coupled to the second lever, the third lever movable to move the first lever between the two different positions.

As discussed in greater detail in the present application, some embodiments of the present invention have three levers that operate to place the latch in a locked and unlocked positions. For example, the claimed latch has a first lever that is moveable between at least two different positions. In one of the two positions, the first lever can pivot about a pivot point to disengage the pawl from the ratchet. In the other of the two positions, the first lever can pivot about the pivot point (which is at the same location with respect to the first lever), but will not cause the pawl to disengage from the ratchet. This first lever is coupled to a second lever at the pivot point, while the second lever is coupled to a third lever.

Although Dzurko teaches a latch with a lever 34 having a pivot point 36 located in substantially the same location with respect to the lever 34 in different positions of the lever 34, only the pawl (detent lever 32) is coupled to the lever 34 at the pivot point 36. Dzurko fails to teach, describe, or suggest any other element (whether a lever as claimed in amended claim 1 or otherwise) coupled to the lever 34 at the pivot point 36. This distinction highlights the fact that the mechanism identified by the Examiner in Dzurko is arranged in no manner

and operates in no manner similar to the latch assembly claimed in amended claim 1. For example, the Dzurko device fails to disclose or suggest a latch having a pawl, a first lever having a pivot point located as claimed in amended claim 1 and that is coupled to another (second lever) at the pivot point, and a third lever coupled to the second lever and movable to move the first lever in a manner also claimed in amended claim 1. Dzurko also fails to teach or suggest the desirability of such an arrangement of elements in amended claim 1, nor how the Dzurko latch could be modified to properly function while having such an arrangement of elements.

With regard to the discussion of Fujihara on pages 10 and 11 of the office action, Fujihara also fails to disclose or suggest a latch assembly having the three levers as claimed in amended claim 1. Although the Fujihara device has a connecting member 16 with a mounting pin 17 in substantially the same location with respect to the connecting member 16 in both of two positions, the Fujihara device lacks a third lever connected and movable as claimed in amended claim 1. Employing the same correspondence of elements suggested on pages 10 and 11 of the office action, the second lever of Fujihara would correspond to the lock lever 18 (coupled to the connecting member 16 at the mounting pin 17). No third lever is employed in the Fujihara device. Fujihara also fails to teach or suggest the desirability of such an arrangement of elements as claimed in amended claim 1, nor how the Fujihara latch could be modified to properly function while having such an arrangement of elements.

Accordingly, the Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejections of claim 1. Claims 2-16 are each ultimately dependent upon amended claim 1, and are believed to be allowable based upon amended claim 1 and upon other features and elements claimed in claims 2-16 but not discussed herein.

Claim 17 is hereby amended, and calls for (amendment marks not shown; underlining added for emphasis):

. . . providing first, second, and third levers, the first lever coupled to the second lever about a pivot point substantially fixed with respect to the first lever, the second lever coupled to the third lever;
pivoting the first lever through a first path about the pivot point, the first lever incapable of transferring sufficient motive force to release the ratchet by pivoting through the first path;
actuating the third lever;
moving the first lever and the pivot point to a different location with respect to the pawl via actuation of the third lever;
pivoting the first lever through a second path about the pivot point;
transferring motive force from the first lever to the pawl by pivoting the first lever through the second path; and
releasing the pawl from engagement with the ratchet by transferring motive force from the first lever to the pawl.

Claim 68 is also hereby amended, and calls for (amendment marks not shown; underlining added for emphasis):

. . . providing first, second, and third levers, the first lever having first and second positions with respect to the pawl, actuation of the first lever in the first position about a pivot being incapable of moving the pawl to an unlatched position;
initiating rotation of the third lever about an axis thereof, the third lever coupled to the first lever via the second lever;
rotating the third lever about the axis toward an unlocked position;
moving the first lever and the pivot from the first position to a second position by rotation of the third lever toward the unlocked position;
actuating the first lever about the pivot after initiating rotation of the third lever; and
moving the pawl to the unlatched position by actuation of the first lever.

As discussed in greater detail in the present application, some embodiments of the present invention have three levers that operate to place the latch in different positions. A first lever is coupled to a second lever, which is itself coupled to the third lever. Movement or actuation of the third lever moves the first lever to the different positions. In at least one such position, the first lever can be pivoted or actuated about a pivot to release a pawl or to move the pawl to an unlatched position. In at least one other position, the first lever is incapable of performing such a function when pivoted or actuated about the same pivot (in the same location with respect to the first lever).

With reference to amended claim 68, the latch taught by Dzurko has no lever and pivot that move together between positions as claimed (i.e., a first position in which the lever can be actuated about the pivot to move the pawl to an unlatched position and a second position in which lever actuation does not move the pawl in this manner). Rather, all of the pivots about which the levers pivot in the Dzurko latch appear to remain in place in the locked and unlocked states of the latch. Furthermore, Dzurko fails to teach or suggest the desirability of a latch having a lever and pivot movable in such a manner, nor how the Dzurko latch could be modified to incorporate such movement while still functioning properly.

Fujihara fails to disclose or suggest a latch assembly having the three levers as claimed in amended claims 17 and 68. As discussed above, although the Fujihara device has a connecting member 16 with a mounting pin 17 in substantially the same location with respect to the connecting member 16 in both of two positions, the Fujihara device lacks a third lever connected and movable as claimed in amended claims 17 and 68. Employing the same correspondence of elements suggested on pages 10 and 11 of the office action, the second lever of Fujihara would correspond to the lock lever 18 (coupled to the connecting member 16 at the mounting pin 17). No third lever is employed in the Fujihara device. Fujihara also fails to teach or suggest the desirability of an arrangement of elements as claimed in amended claims 17 and 68, nor how the Fujihara latch could be modified to properly function while having such an arrangement of elements.

Accordingly, the Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejections of claims 17 and 68. Claims 18-24 and 26-28 and claims 70-78 and 80 are each ultimately dependent upon amended claims 17 and 68, respectively, and are believed to be allowable based upon amended claims 17 and 68 and upon other features and elements claimed in claims 18-24, 26-28, 70-78, and 80 but not discussed herein.

Claim 29 is also hereby amended, and calls for (amendment marks not shown; underlining added for emphasis):

. . . pivoting a lever about a pivot point substantially fixed with respect to the lever and located in a first position with respect to a body of the latch apparatus, the lever incapable of exerting sufficient motive force to release the ratchet from engagement with the pawl when the pivot point is located in the first position;
moving the lever and the pivot point away from the first position with respect to the body of the latch apparatus while the lever remains at least partially actuated;
moving the lever and the pivot point to a second position with respect to the body of the latch apparatus while the lever remains at least partially actuated; and
moving the pawl with the lever to release the ratchet from engagement with the pawl by moving the lever and the pivot point toward the second position.”

As discussed in greater detail in the present application, some embodiments of the present invention employ a lever pivotable about a pivot point, both the lever and pivot point being moveable between a first position in which the lever cannot release the ratchet from the pawl and a second position in which the lever can release the ratchet from the pawl. Additionally, in some embodiments the lever and pivot point are moveable from the first position to the second position while the lever remains at least partially-actuated to cause the pawl to release the ratchet.

In contrast, the latch taught by Fujihara has no feature, element, or structure enabling the latch to operate in such a manner. For example, the connecting member 16 disclosed in Fujihara does not move the ratchet 4 and release the latch 3 (i.e., unlatch) when moved to the unlocked position while at least partially actuated. Rather, the device taught by Fujihara requires double actuation of the door handle and connected levers to unlatch the device when the connecting member 16 is moved to an unlocked position in such a manner (even though the latch can change locked states while the door handle and connected levers are partially actuated). Fujihara also fails to teach or suggest the desirability of the lever and pivot motion claimed in amended claim 29, nor how the Fujihara latch could be modified to properly function in such a manner.

Accordingly, the Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejection of claim 29. Claims 30-36 are each ultimately dependent upon amended claim 29, and are believed to be allowable based upon amended claim 29 and upon other features and elements claimed in claims 30-36 but not discussed herein.

Claim 56 is also hereby amended, and calls for (amendment marks not shown; underlining added for emphasis):

... a lever movable with respect to the pawl;
a rotatable member coupled to the lever and mounted for rotation about an axis, wherein the lever is movable by rotation of the rotatable member coupled thereto, the rotatable member rotatable between:
a first position in which the lever is actuatable to move the pawl to the unlatched position; and
a second position in which actuation of the lever is incapable of generating movement of the pawl to the unlatched position,
movement of the rotatable member from the second position to the first position during actuation of the lever generating movement of the pawl.

As discussed in greater detail in the present application, some embodiments of the present invention employ a rotatable member coupled to a lever and rotatable between a first

position in which the lever can move a pawl to an unlatched position and a second position in which the lever cannot move the pawl to the unlatched position. Additionally, in some embodiments the lever can be moved as just described while actuated in order to move the pawl.

In contrast, no lever disclosed by Dzurko moves a pawl as claimed when the lever is actuated while being moved by another element. Rather, the Dzurko device requires double actuation of the intermittent lever 34 to move the detent lever 32 in such a case (after the lever has been moved to an unlocked position). Indeed, the locking lever 40 of the Dzurko latch won't even stay in the unlocked state when moved from the locked position to the unlocked position during actuation of the door handle (and connected levers). This is due to the arrangement of elements within the Dzurko latch. In the unlocked state, tab 48 on intermittent lever 34 is positioned under ear 46 of transfer lever 44. Thus, actuation of the transfer lever 44 causes ear 46 to press down on lever 36, which in turn causes the detent lever 32 to move. However, when the latch is placed in the locked state, the intermittent lever 34 is rotated so that ear 46 will bypass the tab 48 when the transfer lever 44 is actuated. As such, if an effort is made to move the latch from a locked state to an unlocked state during actuation of lever 44, the ear 46 will interfere with tab 48 and the latch will not stay in the unlocked position (and the detent lever 32 will not be moved). Furthermore, Dzurko fails to teach or suggest the desirability of a latch having a lever capable of generating pawl movement while actuated and being moved by another element, nor how the Dzurko latch could be modified to incorporate such a capability.

Similarly, no lever disclosed by Fujihara moves a pawl as claimed when the lever is actuated while being moved by another element. As described in greater detail above with respect to claim 29, the latch taught by Fujihara does not cause the open lever 11 to unlatch when the lock lever 18 is rotated from a locked state to an unlocked state during actuation of the door handle or connected levers. Rather, the latch disclosed by Fujihara requires double actuation of the door handle or connected levers to release (i.e., unlatch) the open lever 11 even though the latch can be placed in the unlocked state during actuation of the door handle or connected levers. Furthermore, Fujihara fails to teach or suggest the desirability of a latch having a lever capable of generating pawl movement while actuated and being moved

by another element, nor how the Fujihara latch could be modified to incorporate such a capability.

Accordingly, the Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejection of claim 56. Claims 57-67 are each ultimately dependent upon amended claim 56, and are believed to be allowable based upon amended claim 56 and upon other features and elements claimed in claims 57-67 but not discussed herein.

Claim 81 is hereby amended, and calls for (amendment marks not shown; underlining added for emphasis):

. . . an over-center device coupled to the lever at a first pivot and moveable about a second pivot, the over-center device having
a first stable position in which the lever is positioned in the unlocked position by the over-center device with respect to the pawl;
a second stable position in which the lever is positioned in the locked position by the over-center device with respect to the pawl; and
at least one unstable position located between the first and second stable positions, the at least one unstable position located along a line extending through the first and second pivots when the over-center device is in either stable position, wherein
actuation of the lever urges the over-center device away from the unstable position and toward either of the first and second stable positions.

Claim 98 is also hereby amended, and calls for (amendment marks not shown; underlining added for emphasis):

. . . moving at least a portion of an over-center device about a first pivot from a first stable position toward a center position, the over-center device coupled to the lever at a second pivot, the center position located along a line extending through the first and second pivots


As discussed in greater detail in the present application, some embodiments of the present invention have an over-center device coupled to the lever and having two stable positions and at least one unstable position. The lever can be moved between locked and unlocked positions corresponding to the stable positions of the over-center device by passing through the unstable position. In some embodiments, the at least one unstable position can be defined at least in part by a line extending between a pivot about which at least a portion of the over-center device moves and a pivot at which the over center device is coupled to a lever.

In contrast, the disclosed by Fujihara has no over-center device having an unstable position located along a line extending between the pivots as just described. Furthermore, Fujihara fails to teach or suggest the desirability of a latch operable in such a manner, nor how the Fujihara device could be modified to operate in such a manner.

Accordingly, the Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejection of claims 81 and 98. Claims 82, 84-90, 92, 94, 95, and 97, and claims 99-103 and 105-113 are each ultimately dependent upon amended claims 81 and 98, respectively, and are believed to be allowable based upon amended claims 81 and 98, and upon other features and elements claimed in claims 82, 84-90, 92, 94, 95, 97, 99-103, and 105-113 but not discussed herein.

In view of the amendments and remarks presented herein, it is respectfully submitted that the claims as amended are in condition for allowance, and notification to that effect is earnestly solicited. The Applicants kindly request that the Examiner telephone the attorneys of record in the event a telephone discussion would be helpful in advancing the prosecution of the present application.

Respectfully submitted,



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